

12 September 2012

[www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au)

The Hon Senator Matthew Thistlethwaite  
Chairman  
Senate Select Committee on Electricity Prices  
Parliament House  
Canberra 2600

Contact Anna Brakey  
T (02) 9290 8438  
E [anna\\_brakey@ipart.nsw.gov.au](mailto:anna_brakey@ipart.nsw.gov.au)

Dear Senator Thistlethwaite,

#### IPART SUBMISSION TO SELECT COMMITTEE ON ELECTRICITY PRICES

Thank you for the invitation to make a submission to the Senate Select Committee on Electricity Prices.

As the regulator of retail prices in NSW, we are providing information on regulated electricity prices and why they have changed over the past 5 years. We also provide recommendations to adjust policy settings that have led to higher than necessary electricity prices.

If you have queries relating to regulated electricity prices in NSW or in relation to our submission, please contact Anna Brakey on 02 9290 8438 or Alexis van der Weyden on 9290 8460.

Yours sincerely



Peter J. Boxall, AO  
Chairman



Independent Pricing and Regulatory Tribunal

# Promoting the long term interests of electricity customers

IPART's submission to the  
Senate Select Committee on Electricity Prices

Electricity  
September 2012

Inquiries regarding this document should be directed to a staff member:

Anna Brakey (02) 9290 8438

Alexus van der Weyden (02) 9290 8460

Independent Pricing and Regulatory Tribunal of New South Wales

PO Box Q290, QVB Post Office NSW 1230

Level 8, 1 Market Street, Sydney NSW 2000

T (02) 9290 8400 F (02) 9290 2061

[www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au)

# Contents

<b>1</b>	<b>Overview</b>	<b>1</b>
<b>2</b>	<b>Drivers of NSW electricity prices over the past 5 years</b>	<b>3</b>
<b>3</b>	<b>Recommendations to address inappropriate policy settings</b>	<b>4</b>
3.1	Improving productivity to limit future network cost increases	4
3.2	Improving the cost effectiveness of green energy schemes	9
<b>4</b>	<b>Electricity affordability</b>	<b>12</b>
	<b>Appendix A - Who is responsible for energy policies and price setting in the NEM?</b>	<b>16</b>



# 1 Overview

IPART is the economic regulator of electricity and gas retail prices for small customers in NSW that have not entered into a market contract with a licenced retailer. We are well placed to comment on electricity policies, the implications they have for the cost of providing electricity to end-use customers and the impact that rising electricity prices have on households and small businesses in NSW.

Electricity prices in NSW have doubled (including inflation) over the past 5 years in NSW. Network price increases in NSW have been the largest contributor to price increases, followed by changing green policies. In undertaking our reviews IPART provides a significant amount of information on retail prices and the drivers of price changes in NSW (see [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au)). In addition, we provide detailed analysis on the impact of price changes on households and small businesses, particularly low income households.

In our view, the Senate Select Committee review on electricity prices provides an opportunity to take stock of energy policy by noting the reviews that are currently in place and to consider further areas that require review to address inappropriate policy settings.

Commonwealth, State and Territory governments and their agencies have responsibilities in relation to energy policy, so addressing inadequacies requires a coordinated and cooperative approach.

In this context, our submission:

- ▼ Comments on drivers of price increases for small customers in NSW over the past 5 years.
- ▼ Recommends measures to improve productivity by limiting future network cost increases, including:
  - the economic regulation provisions within the National Electricity Rules (currently under review).
  - the governance of State-owned corporations.
  - the appropriate deployment of time-of-use or smart meters.
  - setting reliability standards efficiently and with regard to the willingness of the community to pay for specified standards (currently under review).
- ▼ Recommends evaluating the efficiency and cost effectiveness of Commonwealth and State green schemes and ensuring that they are complementary, well-designed and valued by society.
- ▼ Comments on addressing electricity affordability and customer protection.
- ▼ Clarifies who is responsible for energy policy and price setting.

Our recommendations are summarised below.

## Improving productivity by limiting future increases in network costs

- 1 The AEMC should change the National Electricity Rules : 5
  - to allow the AER to adopt its best estimate of efficient costs 5
  - to allow the AER to set its best estimate of the WACC 5
  - to include only efficient expenditure in the Regulatory Asset Base so that customers do not pay for inefficient capital expenditure 5
  - to improve the incentives for efficient expenditure under the NER for all network operators, and particularly for State-owned corporations. 5
- 2 The merits review process under the National Electricity Law should be changed to deliver a more balanced appeal process. 6
- 3 Governments should have regard to customers’ willingness to pay and conduct a cost-benefit analysis before altering reliability standards. 7
- 4 To facilitate the least-cost delivery of a specified standard, distribution network reliability standards should be expressed on a probabilistic basis. 7
- 5 The roll-out of time-of-use meters should be at the discretion of the customer or their retailer rather than being mandated by governments or distributors. 8
- 6 The Commonwealth Government should close the RET as it is not complementary with the carbon pricing mechanism. If it chooses not to close the RET, it should make a range of improvements including merging the large and small scale schemes into a single scheme. 9
- 7 The national energy efficiency scheme should be designed to encourage lowest cost energy efficiency measures. 12
- 8 Energy affordability measures should be reviewed to ensure they are complementary, comprehensive and well-targeted. Commonwealth, State and Territory governments should engage with energy retailers and community groups in the development of an effective and cost efficient customer assistance package. 12

## 2 Drivers of NSW electricity prices over the past 5 years

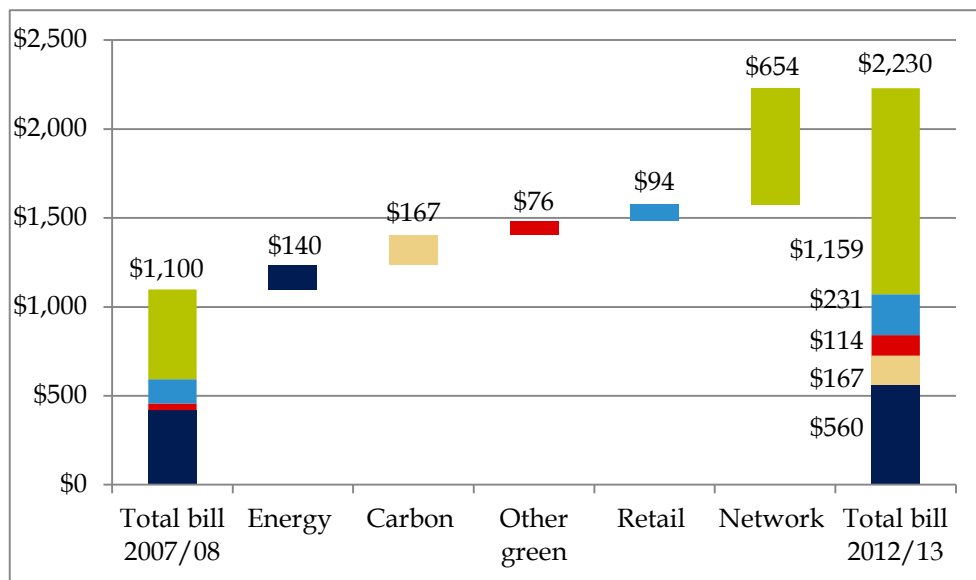
Over the past 5 years regulated retail electricity prices in NSW have more than doubled in nominal terms. In real terms, they have increased by around 79%.

Network charges are the main driver of the price increases. As demonstrated in Figure 2.1, network prices now comprise around half the total retail bill. Over the past 5 years they have increased by 130% in nominal terms (or 102% in real terms), adding around \$654 to a typical retail electricity bill.

The next largest contributor to increases in electricity prices has been the cost impact of introducing or amending green schemes. The introduction of the carbon price contributes \$167 or 9% to a typical retail bill, while the Renewable Energy Target (RET) scheme currently contributes \$102 (increased from \$26 in 2007/08) to a typical retail bill. Currently, the combined cost impact of the carbon price, the RET, the NSW Energy Savings Scheme and the NSW Climate Change Fund adds \$316 to a typical retail bill. The costs of complying with these schemes may increase in the future.

Wholesale energy costs (excluding the impact of the carbon price) and retail costs have increased modestly over the past 5 years.

**Figure 2.1 Change in average NSW residential customer bills, 2007/08 to 2012/13 (\$nominal)**



**Note:** Network charges include contributions towards the Climate Change Fund. The energy, carbon and green costs include losses. Typical bills calculated assuming consumption of 7MWh per year.

### 3 Recommendations to address inappropriate policy settings

IPART has made a range of recommendations to address inappropriate policy settings relating to network costs and green schemes. Many of these recommendations have subsequently been acted upon (although not yet resolved) by governments and agencies commencing reviews. These include reviews of the economic regulation provisions in the National Electricity Rules (NER) by the Australian Energy Market Commission (AEMC), a review of the Limited Merits Review regime initiated by the Standing Council on Energy and Resources (SCER), a review of reliability standards initiated by SCER and the NSW Government and a review of the RET by the Climate Change Authority. It is appropriate for these reviews to continue under the established mechanisms.

There are, nevertheless, additional policies that could be addressed, including ensuring that time-of-use meters are not mandated by Governments but left to the discretion of customers and their retailers.

Our recommendations are discussed below.

#### 3.1 Improving productivity to limit future network cost increases

We support the White Paper's focus on improving the productivity of the energy sector. We have concluded the decline in the productivity of the electricity industry is due to the increased level of capital and labour inputs, as evidenced by our recent review of the productivity of the electricity networks.<sup>1</sup> Improving the productivity of the sector will lower the costs of providing energy to customers<sup>2</sup> and can play a role in reducing the issues associated with the affordability of electricity for vulnerable customers. We consider that there are a range of network-related productivity improvements available in the energy sector.

We consider that recent network cost increases<sup>3</sup>, which are responsible for most of the recent retail price increases, may be higher than necessary due to aspects of the regulatory framework which are contributing to inefficient outcomes. The cumulative effect of the economic regulatory provisions of the NER is rapidly increasing network prices, which flow through to retail prices and customer bills.

---

<sup>1</sup> IPART, *Review of Productivity Performance of State-Owned Corporations*, July 2010.

<sup>2</sup> Relative to where they would otherwise be.

<sup>3</sup> For further information on recent increases in capital expenditure on the NSW distribution network refer to IPART, *Changes in regulated electricity retail prices from 1 July 2011 – Final Report and Determination*, June 2011.

The most important policies relating to network pricing are currently under review. We note that the AEMC is reviewing rule change proposals relating to the economic regulation provisions within the NER and the reliability standards nationally and specifically in NSW. We also note that the Standing Committee on Energy and Resources (SCER) is reviewing the merits review processes within the National Electricity Law (NEL). We support and are participating in these reviews.

We consider one area of network policy that could be addressed is the deployment of time-of-use meters to ensure that they are rolled out at the discretion of the customer or their retailer.

### **3.1.1 We support the AEMC's proposed changes to the NER and recommend further strengthening of the provisions for efficient expenditure**

#### Recommendation

- 1 The AEMC should change the National Electricity Rules :
  - to allow the AER to adopt its best estimate of efficient costs
  - to allow the AER to set its best estimate of the WACC
  - to include only efficient expenditure in the Regulatory Asset Base so that customers do not pay for inefficient capital expenditure
  - to improve the incentives for efficient expenditure under the NER for all network operators, and particularly for State-owned corporations.

The NER sets out the 'rules' for the Australian Energy Regulator (AER) to apply in regulating the monopoly transmission and distribution businesses (among other things). The AEMC is responsible for making changes to the NER.

The AEMC is currently reviewing the economic regulation provisions within the NER. We welcome this review as we consider that the current arrangements are inappropriate and have led to higher than necessary network prices.

IPART has been participating in this review, articulating in detail the problems with the current NER and the improvements that should be made. Specifically, we consider that changes should be made:

- ▼ to allow the AER to adopt its best estimate of efficient costs
- ▼ to allow the AER to set its best estimate of the WACC
- ▼ to include only efficient expenditure in the Regulatory Asset Base so that customers do not pay for inefficient capital expenditure
- ▼ to improve the incentives for efficient expenditure under the NER for all network operators, and particularly for State-owned corporations.

In August 2012 the AEMC released its draft decision on required Rules changes and have largely addressed the issues listed above. We generally agree with that draft decision. However, we think that the AEMC should strengthen its position on including only efficient expenditure in the Regulatory Asset base so that customers do not pay for inefficient capital expenditure. IPART will raise this in our submission to the AEMC.

### 3.1.2 The merits review process should be changed in the National Electricity Law

#### Recommendation

- 2 The merits review process under the National Electricity Law should be changed to deliver a more balanced appeal process.

The review process provided by the National Electricity Law (NEL) allows the network businesses to seek review of specific aspects of the AER's determination to achieve more favourable outcomes. To date, the businesses have sought review of elements of every decision the AER has made on their regulated returns. In NSW, the distribution network businesses sought review of the averaging period for the risk free rate of return in their WACC calculation, which resulted in an additional \$1.9 billion in allowed revenue over 5 years (out of a total of \$18 billion).<sup>4</sup>

The current merits review process involves the Australian Competition Tribunal reconsidering the merits of the AER's decision. This review is limited to particular grounds and can only be made with the Australian Competition Tribunal's leave.<sup>5</sup> We recognise that a limited merits review - in contrast to a wholesale (de novo) review - has the benefit of focusing on the issues in dispute. However, it means that the Australian Competition Tribunal is not able to properly consider the merits of individual component decisions in the context of the AER's whole determination, or the effect that modifying these decisions may have on electricity prices and in meeting the National Electricity Objectives - the long term interest of consumers. Therefore, it cannot consider, for example, whether the businesses will still face appropriate incentives regarding infrastructure investment from other aspects of the AER's decision. The appeal process should ensure that the Australia Competition Tribunal makes a substitute decision only when its decision better meets the National Electricity Objective, compared to the AER's decision.

We consider that where a business contests a specific regulatory decision, the review body should be able to consider this decision in the context of the whole determination, and not be confined to the specific item(s) contested by the business or interveners. This would give further incentive to the network businesses in considering whether they could end up worse off rather than, as at present, knowing that they will be neutral or better off, as a result of a review. We consider that customers should play a greater role in the merits review process.

---

<sup>4</sup> Australian Competition Tribunal, Application on EnergyAustralia and Others (includes corrigendum dates 1 December 2009)(2009) AComptT (12 November 2009).

<sup>5</sup> National Electricity Law, Part 6, Division 3A, Subdivisions 1 and 2.

Further, we think that the review process should apply a less court-like approach to hearing an appeal. In our view, a court-like body such as the Australian Competition Tribunal is not necessarily experienced in broader stakeholder management or the exercise of regulatory discretion. We recommend the establishment of an appeal body that is capable of standing in the shoes of the regulator, undertaking the balancing of competing interests and exercising discretion and judgement in the context of the overall objective of the long term interests of customers.

We note that SCER has initiated a review of the merits review provisions in the National Electricity Law. We have participated in this review and to date we have generally agreed with the panel reviewing the limited merits review regime. We encourage the SCER to make changes to the NEL to provide a more balanced appeal process.

### 3.1.3 Network reliability standards

#### Recommendation

- 3 Governments should have regard to customers' willingness to pay and conduct a cost-benefit analysis before altering reliability standards.
- 4 To facilitate the least-cost delivery of a specified standard, distribution network reliability standards should be expressed on a probabilistic basis.

At present reliability standards are determined by each jurisdiction and are typically set out in the network operators' licence conditions. All else being equal, the higher the standards for reliability and customer service, the higher electricity prices paid by all customers.

The reliability standards set out in the network operators' licence conditions reflect judgements made by Government (on the community's behalf) of the level of service (and the associated cost) valued by the community. In determining these standards governments should consult with electricity consumers - both business and residential customers - to understand the different benefits they enjoy from a more reliable supply of electricity and the extent they would be willing to pay for these benefits through higher energy prices.

The AEMC has recently completed its review of reliability standards in NSW and concluded that reductions in capital expenditure under all three of the review's scenarios for lower distribution investment significantly outweighed the costs to customers of slightly lower levels of reliability.<sup>6</sup>

---

<sup>6</sup> AEMC, *Review of distribution reliability outcomes and standards, NSW workstream*, 31 August 2012.

Currently the standards in NSW include requirements on how distribution businesses must plan their networks in addition to specifying the reliability standards (a 'deterministic' approach). The AEMC engaged the Brattle Group to examine the approach to setting electricity distribution reliability standards and outcomes in Australia, New Zealand, Great Britain, Italy, the Netherlands and the US. The Brattle Group found that:

Whilst the Australian approach to regulating distribution reliability is generally very much in line with other jurisdictions ... NSW appears unique in applying input standards that are driving investment decisions<sup>7</sup>

We are concerned that the deterministic approach that is applied in NSW does not necessarily allow the specified performance of the distribution network at least cost. It is imperative that any regulatory settings encourage the objectives to be achieved at least cost to the community. We therefore recommend that reliability standards be specified on a probabilistic basis.

We encourage the NSW Government to revise its reliability standards prior to the next network determination to ensure that prices are based on any revised reliability standards from the start of the next price path. Further, in merging the current three distribution businesses into Networks NSW the revised asset management plans could be developed on the basis of any new standards.

### 3.1.4 Pursuing cost effective opportunities to deploy time-of-use and/or smart meters

#### Recommendation

- 5 The roll-out of time-of-use meters should be at the discretion of the customer or their retailer rather than being mandated by governments or distributors.

In recent years Australia has experienced declining utilisation of its energy infrastructure. This is driven by the growth in peak demand outpacing the growth in underlying energy consumption. Expenditure is being incurred to provide additional generation and network capacity, with this capacity being used for only a fraction of the time. This additional expenditure is reflected in generation and network prices, and ultimately in electricity bills for customers.

Policies surrounding the deployment of time-of-use meters have been determined by State governments or the distribution businesses themselves in some circumstances.

There are opportunities for improved utilisation of energy infrastructure including minimising peak demand through **cost effective** deployment of time-of-use and/or smart meters.

---

<sup>7</sup> The Brattle Group, *Approach to setting electricity distribution reliability standards and Outcomes*, January 2012, p 13.

We support the take-up of time-of-use and/or smart meters through a competitive market and at the discretion of the customer or their retailer. Customer initiated uptake of time-of-use meters (with the customer potentially paying for the installation of the meter) could target those customers with the greatest willingness or ability to shift their demand. It is likely that individual customers will be in a better position to gauge their ability to respond to price signals than government. Retailers may also be in a position to manage the demand of their overall customer base through programs targeted at individual customers or groups of customers.

Importantly, improving the productivity of the electricity sector requires the benefits from deploying time-of-use and/or smart meters to exceed the costs.

### **3.2 Improving the cost effectiveness of green energy schemes**

We support the Commonwealth Government's commitment to review the current set of 'green schemes', particularly those that are not complementary to the carbon price. In addition to emissions reduction objectives, many of the existing green schemes have additional objectives ranging from industry assistance through to addressing social hardship. Industry assistance is best provided transparently from government revenue, rather than through green schemes and therefore electricity prices.

We are concerned that many of these green schemes may be adding unnecessary costs to energy bills now there is a carbon price and may be creating investment-distorting complexities in energy markets.

#### **3.2.1 Close the Renewable Energy Target scheme (due to the introduction of the carbon pricing mechanism)**

##### **Recommendation**

- 6 The Commonwealth Government should close the RET as it is not complementary with the carbon pricing mechanism. If it chooses not to close the RET, it should make a range of improvements including merging the large and small scale schemes into a single scheme.**

The costs associated with complying with the RET have contributed to recent increases in electricity prices. IPART estimates that in 2012/13 the cost of complying with the RET adds around \$102 (or around 5%) to average to an indicative regulated electricity customer's bill in NSW.<sup>8</sup> This is significantly higher than was forecast when the RET scheme was amended in 2009 and 2010, and higher than the estimates

---

<sup>8</sup> The LRET adds around \$38 to a typical regulated electricity bill in NSW, while the SRES adds around \$64 in 2012/13. This analysis assumes a customer consumes 7MWh per year.

referred to in the Climate Change Authority's recent Issues Paper for the RET review.<sup>9</sup>

The significant increases in the costs associated with complying with the RET and the introduction of the carbon price highlight the need to evaluate the efficiency and cost effectiveness of the Commonwealth Government's climate mitigation measures. Together, the RET and the carbon price add around \$270 to a typical residential customer's bill in NSW in 2012/13. As the target increases each year until 2020, the costs of meeting the LRET are likely to increase (depending on the price of certificates). It is possible that by 2020 the LRET will add more to electricity bills than the carbon price.

It is important to ask whether both the RET and the carbon price are required to reduce emissions efficiently – to test whether they are 'complementary' schemes.

In 2009 IPART undertook a major review of NSW green schemes to determine if they were complementary to the then-proposed Carbon Pollution Reduction Scheme, using an analytical complementarity framework that we developed.<sup>10</sup> We have used this framework to assess the RET and found that it is *not* complementary with the carbon pricing mechanism – namely, it does not address any significant market failure that is not already addressed by the carbon price. Our view is consistent with the views of the Productivity Commission and the findings of the strategic review of climate change policies for the Federal Government in 2008. In this report, Roger Wilkins, AO, concluded:<sup>11</sup>

While there are a variety of opinions on this matter, the Review considers that schemes such as the RET, FITs and demand driven subsidies for the deployment of solar power are not complementary to an ETS. They will, as discussed recently by the Productivity Commission, add to the cost of achieving an abatement target rather than producing additional abatement. The Review would concur with the Productivity Commission's analysis that the RET is likely to add to the cost of abatement, and would not be complementary.

Given that the RET is not complementary with a carbon pricing mechanism, we recommend that the Commonwealth Government close the RET.

We think that it is timely to make this policy change now, ahead of significant new investment that will commence in the next couple of years in order to meet the target in the later part of this decade.

We acknowledge that some large investments have been made on the expectation that the RET would continue until 2030. As a transitional arrangement, we

---

<sup>9</sup> The Climate Change Authority relied on AEMC estimates that were made prior to large upward revisions to the binding liabilities (STPs) under the small scale renewable energy scheme. These estimates therefore understate the cost impact of the RET.

<sup>10</sup> IPART, *Review of NSW Climate Change Mitigation Measures*, May 2009.

<sup>11</sup> Roger Wilkins, AO, *Strategic Review of Australian Government Climate Change Programs*, 31 July 2008, p 141.

recommend that the Commonwealth Government consider providing transitional assistance for existing projects developed under the RET.

If the Commonwealth Government chooses to provide assistance for renewable energy projects, it should coordinate this assistance with programs run by its other agencies (for example the Clean Energy Finance Corporation and the Australian Renewable Energy Agency). Further, it should fund subsidies for renewable energy through the budget rather than by increasing electricity prices. This will address the 'regressive nature' of expenditure recovery through increasing electricity prices and will also ensure that adequate scrutiny is applied to the costs of supporting renewable energy.

Nevertheless, should the Commonwealth Government decide to maintain the RET to provide subsidies to renewable energy, we consider that there are a number of improvements that should be made to the scheme to improve its cost effectiveness and minimise the impact on customers. Most importantly, if the RET is retained, we recommend that the Commonwealth Government merge the large and small scale schemes into a single scheme to create a technology neutral approach to achieving the target. Removing the SRES will encourage a level playing field among renewable technologies and achieve the RET at least cost. The conditions that led the Commonwealth Government to split the scheme in 2010 (specifically the impact of the Solar Credits Multiplier combined with generous state subsidies) have now abated. Future competition between the technologies should be on the basis of cost.

Further, the Commonwealth Government should:

- ▼ Modify the RET objectives by removing reference to emission reductions, which is more efficiently addressed by the carbon price. This would clarify that the RET is focussed on providing subsidies for renewable energy.
- ▼ Apply a technology neutral approach by removing the uncapped SRES to create a level playing field among renewable technologies and encourage the achievement of the RET at least cost.
- ▼ Ensure that electricity customers only pay for actual generation from renewable sources by removing inclusion of waste coal mine generators and the Solar Credits Multiplier (and not introduce any other form of multiplier).
- ▼ Improve the administration of the scheme by bringing forward the release of the retailers' binding liabilities (RPPs).

Nevertheless, if the SRES is retained, the Commonwealth Government should:

- ▼ eliminate the Solar Credits Multiplier
- ▼ cap the amount of certificates that retailers are required to purchase each year
- ▼ review the upfront deeming of certificates
- ▼ require the Clean Energy Regulator to bring forward the release of the binding liabilities on retailers (STPs).

Our recommendations on the RET are outlined in more detail in our submission to the Climate Change Authority on its RET review.

### 3.2.2 Energy efficiency schemes

#### Recommendation

- 7 The national energy efficiency scheme should be designed to encourage lowest cost energy efficiency measures.

Energy efficiency projects offer a low cost means of achieving reductions in carbon emissions. While a carbon price will encourage additional energy efficiency, the Commonwealth Government has indicated that it intends to develop a national energy efficiency scheme.

Energy efficiency schemes will add to electricity prices. The risk is that poorly designed energy efficiency schemes will further add to energy bills if they are costly to administer, poorly targeted, or encourage high-cost energy efficiency options.

The NSW Energy Savings Scheme (ESS) is a tradeable certificate scheme<sup>12</sup>. The ESS is broadly based and recognises a wide range of activities. This helps ensure the most cost-effective options are pursued and costs of administration are minimised.

## 4 Electricity affordability

#### Recommendation

- 8 Energy affordability measures should be reviewed to ensure they are complementary, comprehensive and well-targeted. Commonwealth, State and Territory governments should engage with energy retailers and community groups in the development of an effective and cost efficient customer assistance package.

Our customer impact analysis for NSW illustrates that the most vulnerable customers are those households that have low incomes and high levels of energy consumption.<sup>13</sup> Some of these households may find it very difficult to reduce consumption due to factors such as a high number of household members, inefficient appliances and low quality housing. They are the least able to accommodate rising electricity bills within their household budget, and most likely to face genuine

---

<sup>12</sup> The NSW scheme operates in the residential, commercial and industrial sectors and uses a diverse range of calculation methodologies. Validation of energy savings are done by independent 3rd party auditors and are paid for by the participants. This helps ensure the most cost-effective options are pursued and costs of administration are minimised. In 2010 we commissioned a consultant, Databuild, to review of the costs and benefits of the ESS. In summary Databuild found that the average total costs for each ESC created was \$15 while the value of the energy saved was conservatively estimated at \$40.

<sup>13</sup> IPART, *Changes in regulated electricity retail prices from 1 July 2012 – Final Report*, June 2012, p 65.

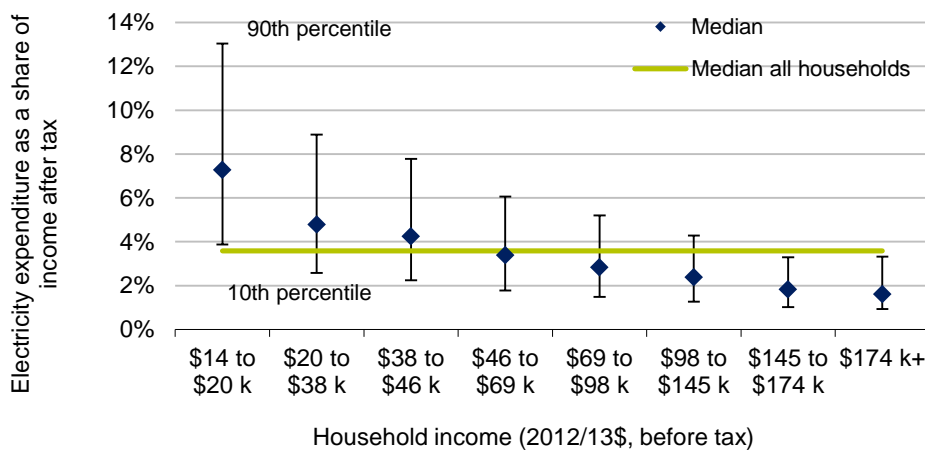
financial hardship as a result of the price increases. Our analysis also identifies that customers in a number of rural areas, including north-western NSW, spend a large proportion of their income on electricity.

In comparison, our analysis shows that most households in the Sydney and surrounding regions earn more than \$45,000 per annum, and for more than 90% of these households electricity bills make up less than 6% of their disposable income. For almost all higher income households (those earning \$140,000 or more per annum) these bills make up less than 4% of their disposable income.

However, we recognise that some low income households with low consumption may also experience financial hardship, and it is important to ensure that these households do not miss out on assistance.

For example, while households with disposable incomes below \$20,000 a year spend on average just over 7% of their income on electricity, there is a large variation in how much of their disposable income they are paying for electricity bills. Some low income but high consumption households are paying around 13% of their income on electricity (see Figure 4.1).

**Figure 4.1 Annual spending on electricity as a share of disposable household income — Sydney and surrounding regions, 2012/13**



**Note:** The income for the middle of each band is used to calculate disposable income. Disposable income as a share of household income is derived from ABS household income distribution data for 2009/10. Income for each band is inflated to 2010/11 using the change in average weekly earnings. Income forecasts for 2011/12 and 2012/13 use NSW Treasury's forecast increase in the average wage index of 3.5%. Disposable income in 2012/13 is further adjusted for the impact of the carbon compensation package. Distributions are presented without weighting survey responses. Customer bills are net of the Low Income Household Rebate.

A **percentile** is the value below which a certain percentage of observations fall. For example, the 10th percentile is the value below which 10% of the observations may be found. In the above diagram, 10% of customers in each income band would fall below the bottom of the vertical line (paying less than that amount) and 10% of customers would pay more than the top of the vertical line.

**Data source:** IPART Household Surveys, 2008 and 2010.

Our analysis for country NSW where recent electricity price increases have been more significant shows that around 11% of households spend more than 10% of their disposable income on electricity.

Governments have a limited budget for customer assistance given the numerous demands across the range of government expenditure priorities. Effective targeting of customer affordability requires using the limited budget to achieve the greatest results including:

- ▼ Ensuring energy prices are efficient and no higher than necessary:
  - Governments to address policy settings that are leading to higher than necessary prices (as discussed above).
  - Encouraging the development of a competitive retail and generation market, where prices are based on costs that are disciplined by the competitive market.
  - Customers actively engaging in the retail market to access the best discounts on offer.
- ▼ Providing effective and cost efficient measures that target the customers most in need of assistance.

Commonwealth, State and Territory governments provide financial assistance to households for their energy bills. This has primarily been in the form of income support, including the pension supplement, utilities allowance, energy rebates and emergency assistance. To a lesser extent, governments have also provided funding to assist households with energy efficiency. It is unlikely that the current approach to customer assistance, characterised by segmented funding and delivery arrangements, is the most effective and cost efficient package.

The segmented nature of the available information and delivery of customer assistance make it difficult to identify a vulnerable household that may be experiencing affordability problems and to deliver the most effective and cost efficient assistance measures – that is, the appropriate mixture of emergency assistance, ongoing income support and energy efficiency measures for individual households.

Achieving ‘value for money’ out of the limited government assistance funding available requires Commonwealth, State and Territory governments, as well as energy retailers and community organisations to consider the appropriate role to play in managing affordability for vulnerable households. Value for money is achieved when the appropriate mixture of emergency assistance, ongoing income support and energy efficiency measures reaches customers most in need. This will require funding from Commonwealth, State and Territory Governments, delivered in a coordinated manner.

For example, emergency assistance (such as EAPA vouchers) should not be relied on as a form of income support. Likewise, income assistance measures should also provide incentives for customers to manage their electricity usage. All measures

need to be complementary to provide an integrated and cost effective package that delivers assistance to those who need it.

Effective assistance measures are essential regardless of whether there is retail price regulation or a competitive retail market.

## Appendix A - Who is responsible for energy policies and price setting in the NEM?

In Australia, the National Electricity Market operates under a set of policies for which the Commonwealth, State and Territory governments have responsibility in conjunction with a range of administrative and regulatory bodies, as illustrated in the diagram below.

The Standing Council on Energy and Resources (SCER) comprises Energy Ministers from the Commonwealth, State and Territory governments. The SCER is the national policy and governance body for the Australian electricity and gas markets. The SCER is responsible for the National Electricity Law (NEL).

The Australian Energy Market Commission is the rule maker and developer for the nation's energy markets. The AEMC is responsible for the National Electricity Rules (NER).

The Australian Energy Regulator (AER) is responsible for regulating the transmission and distribution network businesses, and determining the prices they can charge for the use of their networks. In making its determinations, the AER takes account of the costs the network businesses incur in providing and maintaining the networks. These costs are influenced by:

- ▼ the NER
- ▼ the limited merits review regime (or appeal mechanism) under the NEL
- ▼ the licence obligations the State governments impose on the network businesses (eg, the standards related to the quality and reliability of the electricity supply that the networks must meet).

State-based regulators, such as IPART, are responsible for determining the regulated retail prices (in the states where regulated prices exist). These regulators take account of the costs the regulated retailers incur in supplying electricity. These costs are influenced by the network prices they must pay, as well as the licence obligations Governments impose on the retailers.

In addition, both the State and Territory and Federal governments can make broader policy decisions that affect electricity prices. For example, the Federal Government has implemented the carbon price (which affects the wholesale market costs) and the Renewable Energy Target (which imposes an obligation on retailers). The states have implemented policies that also affect prices, for example the NSW Energy Saving Scheme (which imposes an obligation on retailers).

